

PLAYING AT LEARNING DESIGN

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Abstract

In the present paper, we describe our ongoing work on developing a new game-inspired approach for assisting and training staff in designing for learning. Building on our experiences from the process of working with learning design through structured workshops, we are looking for alternative formats that can facilitate a more holistic and efficient approach to the process. Turning to the field of game-based and playful learning, we seek to examine how we can leverage games to reconceptualise our workshops to accommodate an explorational approach. Our new format is one where staff is encouraged to explore new and unconventional design ideas and reflect on the social, organisational, and pedagogical opportunities in designing for learning. With the aim of creating a game that reflects the rich array of conflicts of interest, tensions, opportunities, and pedagogical and disciplinary traditions involved in learning design, we are collecting interview data from stakeholders across the university. We present a possible framework for offering a workshop format that provides an arena for creativity in designing for learning – *playing at learning design!*

Keywords: Learning design, curriculum design, course design, game-based learning, staff development, playful learning.

1 BACKGROUND

With the increased push towards online teaching provisions, the concept of learning design, or designing for learning, and the idea of “teachers as designers” [1] has gained considerable traction within higher education. On a surface level, learning design represents an effective way of organising and structuring the process of planning, delivering, and evaluating teaching. The systematic nature and tangible outputs of the approach provides possibilities for sharing and reusing teaching resources, strategies, and methods.

Curriculum development and course design is not a formal activity in higher education. Planning the learning that will take place within a study programme or course and making decisions about relevant teaching, learning and assessment activities is often conducted ad hoc and locally. The processes of designing for learning have traditionally been run by individuals or small groups of academic staff, with little formal or informal support. The teachers, who predominantly work from the perspective of subject expertise, are rarely in the habit of sharing pedagogic practices and ideas outside their local context. This ‘private’ nature of teaching can be seen as a reflection of the high degree of autonomy and informality that characterises higher education (e.g., [2]).

In 2018, our university’s staff development unit developed a series of team-based workshops on learning design. These workshops were offered as a way of providing collaborative support and guiding groups of staff through the process of revising or designing courses or curricula. Effecting change in higher education invariably involves a mix of people, processes, and infrastructure [3]. Following the reported findings and recommendations of the Viewpoint project at the University of Ulster [4], bringing the various stakeholders together, both academic and administrative, formed an important part of the objective of the workshop format. According to Nicol, course design workshops can provide a “conducive, social and non-threatening context for the sharing of ideas about teaching and learning across experienced and inexperienced staff alike. The face-to-face nature of these discussions is important to the success of the process as is the emergence (...) of a concrete and visible design plan.” (p. 5).

Articulating and sharing pedagogical designs is unfamiliar terrain for many academic staff, and learning design requires the ability to work at a certain level of pedagogic abstraction. To address this, we structured the workshops around the ASSURE process model [5]. The model makes explicit the iterative nature of the design cycle, from identifying the target student group, choosing assessment and teaching methods, to evaluation.

In building specific course designs, we made use of the ABC method [6]. Based on Laurillard’s Conversational Framework theory [1], the ABC method is a time limited game format where participants

collaborate to create a visual storyboard that outlines the types and sequence of learning activities in a design using a set of cards. This is a practical, hands-on approach where participants actively and physically engage in producing a mutual output. The method proved effective in encouraging dialogue and engagement, and staff would typically report they found leaving the workshop with a concrete plan for their design very rewarding.

2 WORKSHOPS HITTING THE WALL

While the level of engagement was high, and dialogue was active, two main issues emerged: First, keeping the scope of the dialogue and discussions to a workable level, i.e., of direct relevance to the task of producing a course design, was often challenging. We would frequently observe that instead of ‘zooming in’ on the nuts and bolts of designing for learning, participants would often choose to ‘zoom out’, discussing policies or systemic factors and obstacles, such as financial constraints in the sector and the overall university strategy. While these issues are important to uncover and deal with, they would often detract from the main objective of the workshops, i.e., the process of designing for learning. Second, we regularly saw creativity and ideas being stunted by participants’ insecurities or perceived sense of risk of doing something ‘wrong’; e.g., fear of overstepping boundaries of tradition and convention or stepping onto someone else’s territory [7]. This would typically result in participants discarding ideas or reluctance to follow an idea or argument to its conclusion, either themselves or in reaction to others’ comments. The aversion to risk is often expressed in through requests for “golden rules” or checklists for how to design courses in the correct or familiar formats.

While the first issue can be addressed through the facilitators being firmer in keeping the workshop on track, the second issue alludes to something more profound: staff’s sense of agency and perceived room for manoeuvre in the matter of designing and revising programmes and courses. This is at odds with the idea of curriculum change as a creative and diverse activity, an activity where according to Louvel “individuals or groups create something new out of the resources they have at hand—while they still respect certain rules or conventions, they don’t follow any strictly predetermined plan” ([8], p. 670). Annala et al. [9] describe the process of curriculum revision or design as a ‘complicated conversation’, an interactive social process with various ideas, interests, intentions, and dynamics.

3 WHAT TO DO?

Having run the workshop for close to three years and making repeated observations of the issues described in the previous section, the need to revise the format in order to allow for more freedom to explore new and unconventional design ideas became apparent. Although we have previously used games and simulations to provide active learning experiences in theoretically oriented courses in BA and MA programmes, we have yet to try this approach in the context of staff development. Our project seeks to examine how we can leverage games to reconceptualise our workshops. The aim is to provide an arena where our participants are free to explore and reflect on the social, organisational and pedagogical opportunities in designing for learning.

3.1 Playing at learning design?

The use of games and simulations in higher education is becoming increasingly common ([10], [11]). Drawing inspiration from these approaches can provide several benefits for revising our learning design workshops to overcome the challenges we have identified.

Using the logic of games to structure our workshops allows us to break up the different phases in challenges or levels. The ABC-model for course design [6] is one example of using a game-like format for doing this, breaking the process of designing a course into several tasks. A well-known model for game-based learning is Plass et al.’s [12] “magic circle”. The central conceit is that games can create a “magic circle”, where it becomes, or forms, a context that helps the players create meaning. More specifically, the circle is a process of challenges, responses made by players, and feedback from the game, built around the game design. To facilitate learning, this model makes explicit the importance of alignment between the actions performed by the players (game mechanics) and the activities that support learning (learning mechanics). By structuring our workshops as games, the participants must make use of the agency they are afforded in order to solve the challenges they are presented with.

In our case, the overall context for what the game is about is given: Designing for learning in higher education. As described above, this is a complex process that involves several stakeholders in

leadership, administration and academic positions. Peters and Westelaken [13] present a model for making simulation games of complex, real-life situations (the reference system). To work as a model, the reference system must be translated to game elements. This involves a process of identifying the elements that must be a part of the game, and the extent to which processes and elements can be simplified or made abstract. The simplified model of the situation is then mapped onto the game elements to create a playable game.

To make sure our game-structured workshops provide a cycle of challenges, responses and feedback that allows the players to get simulated experience with learning design, we consider it to be important that the translation of the process of learning design to a game scenario is done right. In our context, this necessitates an empirical approach. Empirical data is collected through interviews with the stakeholders involved in learning design across the university. This will allow us to uncover commonly experienced issues with learning design and course planning. In our continuing development of the game-workshop model, we will work with our reference panel to translate the reference system to a game scenario that represents the experiences of the stakeholders.

3.2 Playfulness and graceful failure

A prime feature of games is the element of playfulness. Homer et al. [14] offers a thorough discussion of games as playful learning, spanning from perspectives from developmental theory to current discussions in the field of game-based learning. They identify several principles for playfulness in learning that we see as useful for structuring our workshops as games: intrinsic motivation, breaks from reality, opportunities to apply different learning theoretical approaches, and integration of playfulness and learning. Playfulness can offer engagement and challenge, and frame it as a collaborative effort. Playfulness can transport the players from everyday academic life to a playground where exploration of possible course designs is not limited by the constraints of how things are “usually or always done”. The opportunities to consider learning design choices in a risk-free context can be considered one of the major potential benefits of “playing at learning design”. Plass et al. [12] describe this as graceful failure: “Rather than describing it as an undesirable outcome, failure is by design an expected and sometimes even necessary step in the learning process” (p. 261). By mitigating the potential negative effects of failing, it is possible to promote straying from the paths we consider to be safe.

Designing a course, or study programme, is generally perceived as a risky venture. There are administrative requirements and deadlines to consider, division of workload, responsibility for student satisfaction and performance, and so on. These considerations are real barriers for programme and curriculum development, but also for focusing on alternative approaches when developing learning designs. With our playful workshop approach, we aim to create a context (or magic circle, if you will), where the participants will feel safe in exploring different, potentially more creative, approaches to their learning designs than what they think is possible within the perceived reality of their ordinary course or programme.

To sum up, our objective is to use elements from games to frame and structure our workshops in design for learning to create a playful scenario that offers the participants opportunities for engaging with a simulated experience of how designing for learning works in practice. This includes tools and approaches for creating learning activities, and opportunities to internalise good practice and increase awareness of challenges and opportunities in working with structured learning design.

4 CURRENT STATUS

To create a believable and constructive game scenario that accurately reflects the rich array of conflicts of interest, tensions, opportunities and pedagogical and disciplinary traditions involved in the complicated conversation that is designing for learning, we are grounding the design in the experiences and perceptions of the involved stakeholders (i.e., leadership, administrative and academic staff). We are currently in the process of conducting in-depth interviews with different groups of staff across the university who inhabit the various roles in the planning and revision of study programmes and courses. While we as instructors have identified what we perceive as issues with the flow of our workshops, we also want our revised approach to accommodate issues and challenges perceived by all involved stakeholders. Design of a prototype workshop format will be based on the initial interviews, and playtested with the reference panel.

4.1 Initial findings

From our initial findings from our interview data and observations we have so far identified some emerging themes that can be integrated in the game's cycle of challenges. These can be categorised into stakeholders' experiences and perceptions of:

- i) Understanding of learning design on a *conceptual level*,
- ii) The role of the *individual versus the collective* in the design process, and
- iii) Perceived *agency and constraints* in relation to technical and administrative structures.

In line with accumulated experience from conducting workshops over the past four years, our data suggest that there are differences in staff's understanding of what is meant by learning design. These can roughly be separated into the view of learning design as a *product or output*, e.g., a programme or module, or as a *process*, i.e., a sequence of tasks and operations to be conducted. Differences on the conceptual level have consequences for how staff collaborate and communicate when working with learning design. Discrepant views may give rise to misunderstandings and disagreements within a group of staff when formulating or revising learning design.

Several of the issues to come out of our interviews concern the social or collegial, and academic side of the process. As is the case with teaching-related duties in general, learning design is perceived as a largely individual undertaking. Challenges arise when a group of staff are put in a situation where they may be required to fit their teaching into a broader design, both on an academic and a personal level. As one of our interviewees, a module coordinator, put it "*we are all used to being in our own bubble, and we are not used to having to argue and justify our decisions when it comes to teaching on our own subject*".

The third, and perhaps most prevalent in our data thus far, is the extent to which staff feel they have room for manoeuvre in designing for learning and how competent they feel in what they are doing. Issues concerning staff's feelings of uncertainty have a large impact on the process of learning design, ranging from administrative deadlines and processes to practical issues with use of technology in teaching. Issues such as these are described as "*taking a disproportionate amount of time and focus*". Furthermore, unclear information regarding deadlines and steps of approval processes are seen as barriers to working efficiently with revisions and new programmes. The protocols for quality assurance are seen as necessary and important, but our informants express a desire to clarify the lines between administrative and academic tasks as this would increase the ability to focus on them.

As referred to in section 3.1, we base our approach to prototyping the game on Peter's and Westelaken's model for designing serious games [13]. Our data collection informs how we envision the process of learning design as our reference system. As we isolate and identify the challenges and constraints that our participants encounter when developing the learning designs for their courses/programmes, we can make these explicit by translating them to game mechanics. To make meaningful challenges, this means deciding at what level of realism the issues need to be present in the game scenario. Some issues (or stakeholders) can be abstracted and simplified, while others require a higher degree of realism. As we develop the prototype game, this process of tuning the level of abstraction will also focus on how to best create challenges for players that enable them to move between the different levels (or zones) of the learning design process: i.e.: creating defined sets of learning activities (outputs), comprehensive plans for programmes (process) and navigating the constraints tied to the organizational procedures (structures). Furthermore, we do not want the possible responses players can make be too 'closed'. Some issues (i.e., technical insecurities) can have several possible solutions, and the possible responses players can propose can vary. This means that in our role as game facilitators, we will have to be prepared to provide feedback to the players that is not ruled by a pre-ordained list of correct answers, but rather tailored to the context of the scenario.

4.2 Partial conclusions

Our initial data collection has uncovered some overarching themes that will inform our further data collection, and structure our reference model of learning design as a framework for a prototype game. Several of the issues we have encountered in our traditional workshops can be framed as distractions that should be eliminated in order to streamline the workshop process. Through our initial work with the stakeholders on moving to a game-inspired structure, it has become clear that these issues are important to include in the game as challenges to be resolved. The structure and type of

programme/course informs learning designs, and in order to be relevant for participants the game must be flexible enough to encompass different use-cases.

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